



Black Carbon Emissions and Climate Change: A Technical Workshop

October 13-15, 2004
Hyatt Islandia
San Diego, California

AGENDA

DAY 1

Wednesday, October 13

Welcome – Joe Suchecky - *EMA*, on behalf of the Organizing Committee

Workshop Objectives – Doug Lawson - *NREL*

Session 1 – Black Carbon in Climate Modeling (Session Chair, Matthew Thornton - NREL)

Brooke Hemming – *EPA: Quantifying the Influence of Black Carbon on Climate: What are the uncertainties?*

James Hansen – *NASA: Faustian Aerosol Bargain: Payment Comes Due*

Michael Prather – *University of California, Irvine: Greenhouse Forcing from Short-lived Gases and Aerosols: Uncertainties due to Geographic Variability and Indirect Effects*

Johann Feichter – *Max Planck Institute, Germany: The Role of Soot Particles in the Climate System: Progress and Uncertainties in Modeling*

V. Ramaswamy – *NOAA: Modeling the Effects of Black Carbon on Climate*

Lisa Graham – *Environment Canada: Black Carbon Research at Canadian Federal Laboratories*

Session 2 – Measurements of Ambient Black Carbon (Session Chair, Russell Jones - API)

Pat Arnott – *Desert Research Institute: Aerosol Light Absorption Measurements during the Reno Aerosol Optics Study: Method Comparison for Laboratory-generated Aerosol*

John Ogren – *NOAA: Worldwide Measurements of Aerosol Radiative Properties*

Kimberly Prather – *Scripps Institution of Oceanography: Real-time Measurements of the Mixing State of Elemental Carbon*

Phil DeCola – *NASA: Space-based Measurements of Black Carbon*

Session 3 – Emissions of Black Carbon (Session Chair, Eileen McCauley - CARB)

Andy Miller – *EPA: Carbon Emissions from Stationary Sources*

Joseph Somers – *EPA: Mobile Source Black Carbon Emissions*

Michael Kleeman – *UC Davis: Emissions of Black Carbon In California*

DAY 2

Thursday, October 14

Session 3 – Emissions of Black Carbon (cont'd.)

Tami Bond – *University of Illinois: Black Carbon from Combustion Source to Radiative Impact: Where are the biggest uncertainties?*

Jose Vanderlei Martins – *NASA Goddard: Spectral Absorption Properties by Black Carbon and Other Aerosols: Measurements and Effects*

Session 4 – Mobile Source Black Carbon Emissions and Source Apportionment Studies (Session Chair, Andy Miller - EPA)

Steven Cadle – *General Motors: On-Road Mobile Source PM and Black Carbon Emission Rates*

Nick Barsic – *John Deere: U.S. Mobile Source Non-road Black Carbon Emissions*

Eric Fujita – *Desert Research Institute: Source Contributions to Ambient Concentrations of Black Carbon in Colorado's Northern Front Range and California's South Coast Air Basin*

Jamie Schauer – *University of Wisconsin: Elemental Carbon Emissions from Mobile Sources: Understanding the Controlling Variables and Resulting Vehicle Fleet Averages*

Session 5 – Emission Inventory Uncertainties and their Influence on Model Output (Session Chair, David Chock - Ford)

Chandra Venkataraman – *Indian Institute of Technology, Bombay: Uncertainties in Black Carbon Emissions and Model Predictions: A South Asian Perspective*

Greg Carmichael – *University of Iowa: Characterizing Uncertainties in Emissions, Lessons Learned from Recent Field Experiments*

Ruby Leung – *Pacific Northwest National Laboratory: How Well Can We Simulate the Regional Hydrological Cycle and Its Sensitivity to Climate Change?*

Joyce Penner – *University of Michigan: Uncertainties in the trends of black carbon emissions: Contribution to vertical temperature change*

Chien Wang – *Massachusetts Institute of Technology: Regional Black Carbon Emissions and global aerosol-climate model results*

Mark Jacobson – *Stanford University: Black Carbon Effects on Climate with Different Emissions and Model Treatments*

DAY 3
Friday, October 15

Breakout Session 1

- Model input needs
- Measurements needs
- Emissions inventory needs
- Source Apportionment needs
- Point/Area source modeling needs
- Mobile source modeling needs

General Discussion (entire group)

- Summaries of each group's research priorities
- Group Discussion regarding priorities